To: John Neylon – NTSB

05/17/2013

From: George Taylor – Old School Aviation LLC

Report on Glider N2045T – Schweizer 2-33A

Owner: Civil Air Patrol

This glider came to us for a total restoration in the fall of 2012. Due to lack of funding from the CAP the restoration never took place and the glider sat on its trailer in front of our shop through the winter. Come spring we were asked to get the glider flyable mainly due to the loss of their other 2-33 glider during Hurricane Sandy. We were told that the trailer which the glider was sitting upon was needed elsewhere. We decided to assemble the glider and perform the annual inspection.

Date:

Four of us installed the wings and while installing the tail surfaces I noticed that the fabric covering was bad on the elevators and horizontal stabilizer. The rudder had been removed at an earlier date due to previous damage. I notified the CAP and was told to submit an estimate for the repairs. Since we could not complete the inspection we tied the glider to a tie down spot in the grass.

Approximately one month passed by the time the new fabric was installed and the tail surfaces were ready to go back on the glider. We were going to bring the glider back to the shop to finish the inspection but the main tire was completely flat with a sizable crack in the side wall. We could not move the glider in that condition so I told Pete Ferri, one of my helpers, that we would remove the wheel and complete the inspection at the tie down.

Pete is not an A&P mechanic but is a long time glider owner and pilot, is a good mechanic and was working under my supervision. So Pete and I set the tail surfaces in place and started the attach bolts. The rudder cables were inside the fuselage so I stuck my arm inside the tail inspection hole and inserted the cable on the left through its cable exit in the left side of the fuselage and vice versa. I then returned to the shop and left Pete to finish the installation. When he had finished I went back out and checked his work. We performed a positive control check. I stood at the rear of the aircraft and held the control surfaces as Pete worked the controls in the cockpit to make sure everything was connected and secure. I held the rudder while Pete worked the pedals. It worked and was secure but from my position I could not see which pedal Pete was pushing, and I did not verbally confirm that with him. That night after work Pete stopped by the airport and rechecked his work.

On Saturday May 4<sup>th</sup>, CAP came to fly, and during a walk around inspection they discovered that a nut was missing on a wing strut bolt. So, I took another aircraft mechanic with me, Scott Sakos, and we installed the nut and looked over all the other bolts, cotter pins and connections on the glider.

I feel it is important to note that item number one on the pilot's preflight check list is, "Inspect the following for condition, operation, security of attachment and / or other signs of failure." All the controls are listed. This is especially critical any time major work is done to the aircraft. If the pilot had properly completed this checklist item, the aircraft would have never left the ground.

This accident is terribly unfortunate. In my 35 years of working on these aircraft I have assembled hundreds of gliders, and I have never before had anything like this happen.

If there is any additional information that is required by the NTSB, please let me know.

Thank you,

George Taylor Old School Aviation LLC